

**IN THE DRAWINGS:**

Please enter into the application Figs. 12 and 13 as found on the replacement sheet attached hereto.

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REMARKS

The Office Action of March 29, 2006, has been carefully considered.

Objection has been raised to the drawings as now showing the reference signs mentioned in the specification, channel 4b, glove 50 and sensor 1'. Figures 12 and 13 have now been amended to show these reference signs. A replacement drawing sheet (3/4) is attached hereto.

In addition, a substitute specification has been attached hereto in clean and marked-up forms. The reason for submission of this substitute specification is to change throughout the specification "fibre" to "line," which is an improved translation of the original Italian text. This line is defined as element 15 in the specification, and is actually a "generic line" (page 8, line 25) and not a specific physical element.

The substitute specification also provides a reference to the originally filed PCT application and correct several typographical errors.

Claims 2 through 5 have been rejected under 35 USC 112, second paragraph, as being indefinite on the grounds that the "medium" that transmits a signal is the "fibre," and therefore the same structure is being claimed twice. In fact, as noted above, the "line" is actually a generic element which is just a line, and therefore the medium is actually a physical element associated with the line.

A new set of Claims 14 through 26 has now been added to the application, replacing originally filed Claims 1 through 13. Claims 14 through 21 are method claims, Claim 22 and 23 are directed to a glove, Claims 24 and 25 are directed to a device for measuring rotation of a wrist, and Claim 26 is directed to a device for localizing an object. It is

understood that these claims are subject to restriction corresponding to the original claims. With the filing of these claims, Applicants believe that the antecedent basis and indefiniteness problems relating to the originally filed claims have been corrected. Withdrawal of this rejection is requested.

Claims 1, 2, 5 and 6 have been rejected under 35 USC 102(b) over Slocum.

Slocum discloses a mechanism for determining position and orientation in space, but does not disclose a line which is parallel to the axis of an elongated element, as is defined according to the claimed invention. Slocum cannot therefore anticipate the claimed invention and withdrawal of this rejection is requested.

Claims 1, 2, 5 and 6 have been rejected under 35 USC 102(b) as anticipated by Danisch.

Danisch discloses a fiber optic bending and positioning sensor, but does not measure length variation of a line connected to objects. To the contrary, Danisch measures loss in light detection, which is used to produce an indication of curvature displacement.

Withdrawal of this rejection is requested.

Claims 3 and 4 have been rejected as obvious over Danisch on the basis that Danisch's fiber is suggestive of a cable. Regardless, Danisch does not measure the displacement of a cable, but rather a loss in optic properties.

Withdrawal of this rejection is requested.

Claims 1, 2, 5 and 6 have been rejected under 35 USC 102(b) over Hodac, and Claims 3 and 4 have been rejected under 35 USC 103(a) as obvious over Hodac.

Hodac discloses a differential bending detector in which a length variation is measured between the axis 23 of an

elongated element 22 and the axis of a length 3. Hodac does not, however, measure the variation in the length of a line defined between first and second objects and parallel to a neutral axis, and withdrawal of these rejections is requested.

Claims 1 through 6 have been rejected under 35 USC 102(b) as anticipated by Challis.

Challis measures angular displacement utilizing a tightly wound coil spring conduit which shortens on the outside of the bend without substantially shortening on the inside of the bend. A wire is disposed within the conduit which extends from one end to the other and movement of the wire is measured to determine angular displacement.

Challis does now, however, disclose or suggest defining at least one line spaced apart from the neutral axis between two objects, and measuring a variation in length of that line during the relative rotation.

Withdrawal of this rejection is requested.

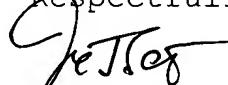
Claims 1 through 6 have been rejected under 35 USC 102(b) as anticipated by Hindes.

Hindes discloses a radius of curvature transducer in which only curvature is measured, and it is necessary that the elongated element remain in a plane with its curvature constant for the entire length of the elongated element.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,

  
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